

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) ~~An antenna-assembly for a handheld telecommunication apparatus, comprising:~~  
a conductive element defining a planar antenna which is permanently external to a housing of a handheld telecommunication apparatus; and  
a generally flat and planar flexible ~~tongue-shaped member~~ arranged to carry the conductive element and to protrude and be disposed permanently in at a fixed position from and relative to a surface of the housing of the handheld telecommunication apparatus; and wherein  
the member tapers in width from the fixed position to an end of the member and the member is flexible in use of the assembly.
2. (Currently Amended) ~~An antenna-assembly as claimed in claim 1~~ wherein the conductive element is embedded in the flexible member.
- 3      Cancelled (without disclaimer or prejudice)

4. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 1, wherein the conductive element is disposed on a central bend axis of the flexible member.

5. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 2, wherein the conductive element is disposed on a substrate.

6. (Currently Amended) An ~~antenna~~-assembly as claimed in 5 wherein the substrate material comprises an aperture.

7. (Currently Amended) An ~~antenna~~-assembly as claimed in 5 wherein the conductive element is disposed between the substrate and a second substrate material.

8. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 1, wherein the flexible member is biased towards a generally planar equilibrium.

9. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 1, wherein the assembly further comprises a relatively rigid base portion for connecting the assembly to the handheld telecommunication apparatus.

10. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 1, wherein the conductive element is a pre-formed wire.

11. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 1, wherein the conductive member is a stamped out pattern from a planar sheet.

12. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 10, wherein the conductive element is stainless steel or spring steel.

13. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 5, wherein the conductive element is disposed on the substrate by a process of etching.

14. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 5, wherein the conductive element is disposed on the substrate by a process of printing using conductive ink.

15. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 5, wherein the substrate is polyester.

16. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 5, wherein the substrate is polyamide.

17. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 1, wherein the flexible member is a thermo plastic elastomer.

18. (Currently Amended) An ~~antenna~~ assembly as claimed in claim 9 wherein the rigid base portion is 10-15% glass filled polypropylene.

19-21 Cancelled (without disclaimer or prejudice)

22. (Currently Amended) A method of producing an antenna assembly comprising the steps of:

arranging a planar antenna element to be disposed on a substrate;  
and

encapsulating the planar antenna element within a generally flat and planar, ~~tongue-shaped,~~ flexible member by means of an injection moulding process; and wherein

the member longitudinally tapers in width.

23. (Previously Presented) A method as claimed in claim 22 wherein the flexible member is produced by moulding operations performed on opposing sides of the substrate.

24. (Original) A method as claimed in claim 23 wherein the moulding on each side extends beyond the outer edge of the substrate.

25-27 Cancelled (without disclaimer or prejudice)

28. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 2, wherein the conductive element is a pre-formed wire.

29. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 3, wherein the conductive element is a pre-formed wire.

30. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 4, wherein the conductive element is a pre-formed wire.

31. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 2, wherein the conductive member is a stamped out pattern from a planar sheet.

32. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 3, wherein the conductive member is a stamped out pattern from a planar sheet.

33. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 4, wherein the conductive member is a stamped out pattern from a planar sheet.

34. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 11, wherein the conductive element is stainless steel or spring steel.

35. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 6, wherein the conductive element is disposed on the substrate by a process of etching.

36. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 7, wherein the conductive element is disposed on the substrate by a process of etching.

37. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 8, wherein the conductive element is disposed on the substrate by a process of etching.

38. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 9, wherein the conductive element is disposed on the substrate by a process of etching.

39. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 6, wherein the conductive element is disposed on the substrate by a process of printing using conductive ink.

40. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 7, wherein the conductive element is disposed on the substrate by a process of printing using conductive ink.

41. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 8, wherein the conductive element is disposed on the substrate by a process of printing using conductive ink.

42. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 9, wherein the conductive element is disposed on the substrate by a process of printing using conductive ink.

43. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 6, wherein the substrate is polyester.

44. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 7, wherein the substrate is polyester.

45. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 8, wherein the substrate is polyester.

46. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 9, wherein the substrate is polyester.

47. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 6, wherein the substrate is polyamide.

48. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 7, wherein the substrate is polyamide.

49. (Currently Amended) An ~~antenna~~-assembly as claimed in claim 8, wherein the substrate is polyamide.

50. (Currently Amended) An antenna assembly as claimed in claim 9, wherein the substrate is polyamide.

51-52 Cancelled (without disclaimer or prejudice)

53. (Previously Presented) A method as claimed in claim 24, wherein holes are provided through the substrate inside the circumference of the substrate.

54. (Previously Presented) A method as claimed in claim 53, wherein cohesive bonding between the moulding on each side occurs through said holes.

55. (Previously Presented) A method as claimed in claim 24, wherein the substrate is made of transparent polyester and the moulding on each side has a non-uniform thickness of a thermo plastic elastomer.

56. (Previously Presented) A method as claimed in claim 55, wherein the temperature of the thermo plastic elastomer is controlled during the injection moulding process to avoid damage to the polyester substrate.



57. (Currently Amended) A handheld telecommunication apparatus comprising:

a planar antenna disposed on a substrate which is permanently external to a housing of the handheld apparatus; and

a generally flat and planar, ~~tongue-shaped,~~ flexible member encapsulating the planar antenna and the substrate, said flexible member coupling said antenna to the handheld apparatus and being arranged to protrude and be disposed permanently in at a fixed position from and relative to a surface of the housing of the handheld telecommunication apparatus; and wherein

the member tapers in width from the fixed position to an end of the member and is flexible in use of the apparatus.

58. (Previously Presented) A handheld telecommunications apparatus as claimed in claim 57, wherein said flexible member includes moulding on each side of said substrate, said moulding extending beyond the outer edge of said substrate.

59. (New) A method in accordance with claim 22 wherein:  
the antenna assembly is an external antenna for a handheld telecommunications apparatus.

60. (New) An antenna assembly for a handheld telecommunication apparatus comprising:

- a conductive element defining a planar antenna; and
- a generally flat and planar flexible member arranged to carry the conductive element and arranged to protrude and to be permanently external to and to be permanently in a fixed position from and relative to a surface of a housing of the handheld telecommunication apparatus; and wherein

the member tapers in width from the fixed position to an end of the member and the member is flexible in use of the assembly.